

ABSTRACT

Disclosed herein are methods for the recovery of an organic acid, such as a heat stable lactic acid, from a feed stream comprising at least one of an organic acid amide, an organic acid ammonium salt, or an alkylamine-organic acid complex. The feed stream
5 that comprises the organic acid amide, organic acid ammonium salt, or alkylamine-organic acid complex is mixed with at least one azeotroping agent. The azeotroping agent is a hydrocarbon capable of forming at least one azeotrope with the organic acid that is produced by the thermal decomposition of the amide, ammonium salt, or complex in the feed stream. Preferably the azeotrope is a heteroazeotrope. The mixture
10 comprising the feed stream and the azeotroping agent is heated to produce a vapor stream that comprises the azeotrope. The vapor stream can be condensed to a liquid stream, and the organic acid is recovered in the liquid stream that is produced. When the azeotrope comprising the organic acid is a heteroazeotrope, the vapor stream can be condensed into a liquid stream, which can be separated into a first phase and a second phase. The first
15 phase contains the highest concentration of organic acid and the second phase comprises azeotroping agent. The organic acid can be further purified and/or concentrated from the separated first phase or from the liquid stream.